Sears

owner's manual

SEARS
9" PORTABLE
BLACK & WHITE TELEVISION

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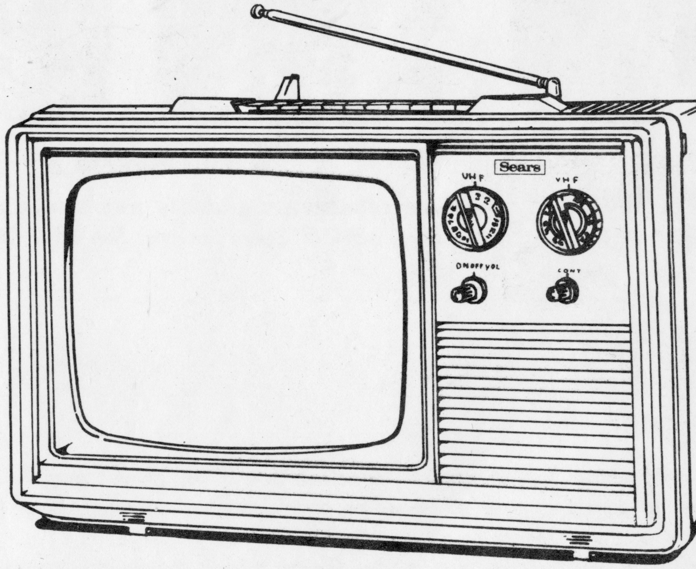


- Operation
- Repair Parts
- Guarantee

NOW YOUR UNIT
Read this booklet so you will be able to enjoy all the features in your television.

SEARS, ROEBUCK AND CO., U.S.A.

PART NO. 46-38384-3

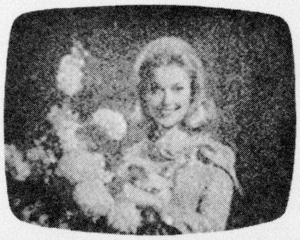
INSTALLATION AND ANTENNAS

INSTALLATION

LOCATE the television receiver so that harsh direct lighting does not glare on the screen. Use a soft indirect lighting. Reflections can cause eye-strain.
ALLOW adequate space between the receiver back and the wall to permit proper ventilation.
AVOID excessively warm locations to prevent damage or premature tube failure.
CONNECT the receiver to an electrical outlet supplying 120 volt, 60 cycle alternating current (AC) only. This set is equipped with a polarized plug. If you have difficulty inserting the plug, turn it over and reinsert.
Check that antenna leads on the back of the set are connected to the proper terminals.

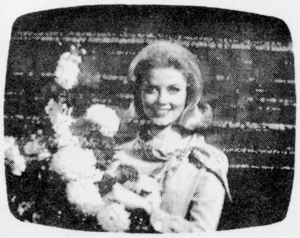
ANTENNAS

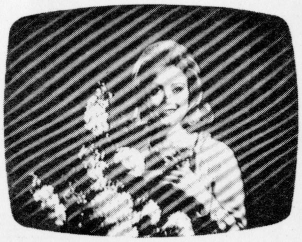
This receiver is equipped with a tele-roto VHF indoor antenna which will provide an excellent picture in most areas.
To receive channels 2 through 13 (VHF reception), pull up the antenna rod to full extension and adjust to obtain proper sound and picture quality.
To receive channels 14 through 83 (UHF reception), there is a special UHF loop antenna connected to the terminals on the cabinet back marked "UHF." Adjust loop for best picture and sound.
In weak signal areas, it may be advisable to use an outdoor antenna. If this is the case, your Sears serviceman will suggest the best type of antenna to use in your area.
When an outdoor antenna is used, disconnect the indoor antenna before connecting the outdoor antenna.



- **"SNOW" OR WEAK PICTURE**

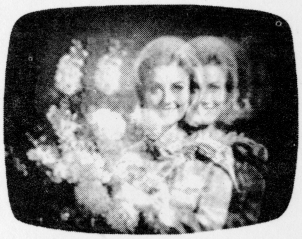
This condition is a result of a weak signal. Reposition antenna or install an adequate outdoor antenna.





- **INTERFERENCE**

These conditions are usually only temporary. If conditions persist, contact Sears service. See HELPFUL HINTS.

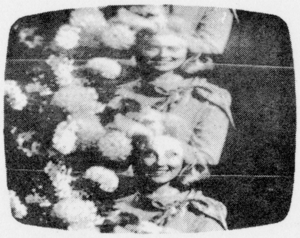


- **GHOSTS**

Multiple images are caused by reflected signals. This condition can be improved by repositioning the antenna.

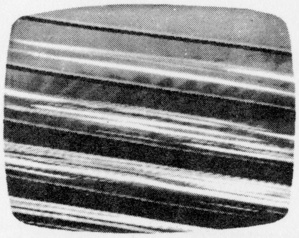
HELPFUL HINTS

★ If sound and picture fail to appear, check to see if the power plug is firmly seated in the wall outlet.
★ If picture and sound appear to be weak, check antenna connections at the rear of the receiver; also check for broken connections at the antenna.
★ Poor picture quality may be due to the station having temporary transmission difficulty. Check this by selecting another channel.



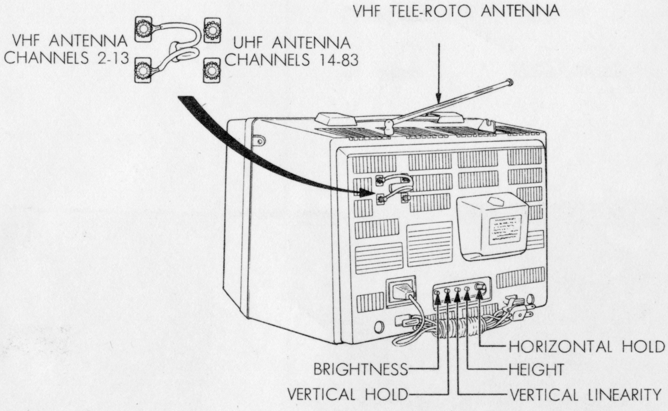
- **VERTICAL INSTABILITY**

When the picture is moving up or down on the screen, adjust VERTICAL HOLD.

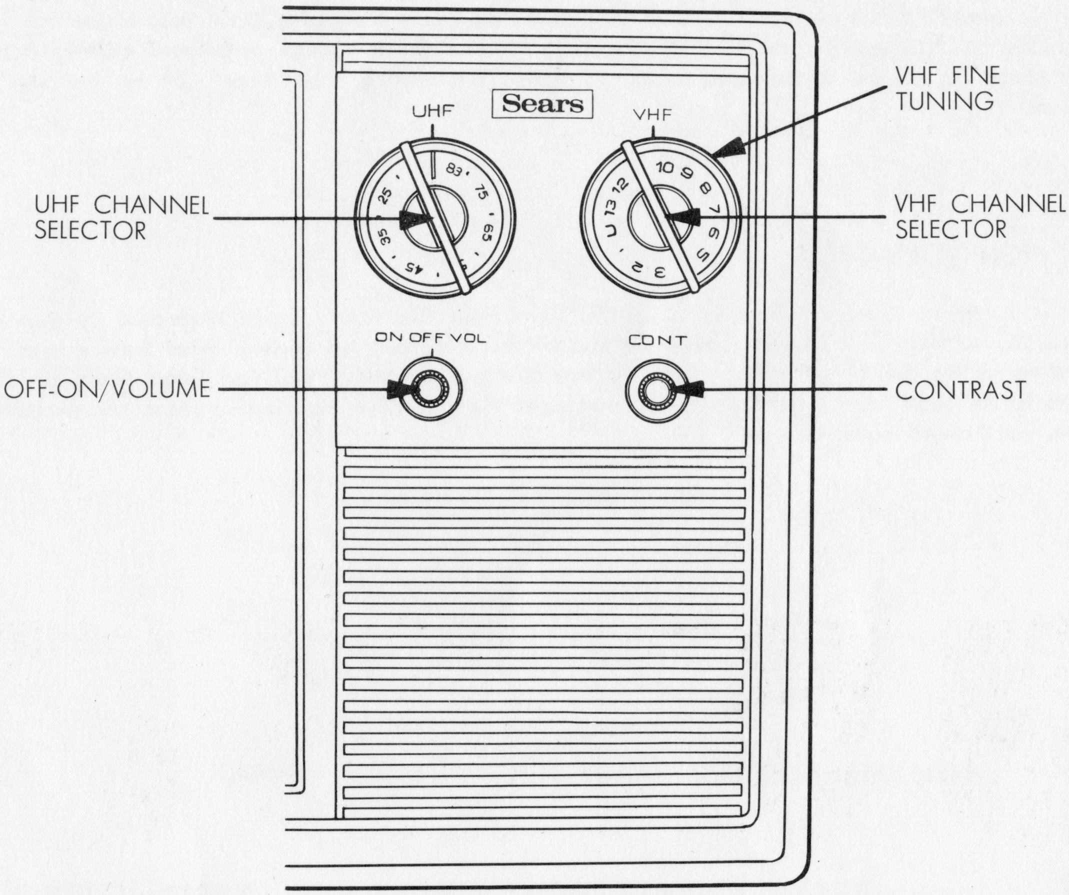


- **HORIZONTAL INSTABILITY**

When the picture is slashed into horizontal or diagonal bars, adjust HORIZONTAL HOLD.



OPERATION AND CONTROL PANEL



CONTROL PANEL DETAIL

CONTROLS

OFF-ON /VOLUME— Rotate knob to turn receiver on and turn to adjust volume. Normal warm-up time of about 20 seconds will be required.

VHF CHANNEL SELECTOR KNOB selects the station to be viewed, from channel 2 through channel 13. Rotate the knob until the desired channel number is aligned with the indicator line. Adjust the VHF Fine Tuning.

VHF FINE TUNING tunes in the station selected for best picture and sound. Rotate the control slowly in either or both directions until the best picture and sound is received.

UHF OPERATION (Channel 14 through 83) Rotate VHF Channel Selector Knob to the UHF position. Turn the UHF CHANNEL SELECTOR KNOB until the desired station appears on the screen. Continue tuning until picture fades, then reverse direction and tune in best picture and sound.

VERTICAL HOLD Control, which corrects any up and down movement of the picture, is located on the lower back of the cabinet. See the illustration at the left.

HORIZONTAL HOLD Control, which corrects any slanting of the picture is located also on the cabinet back. See the illustration at the left.

CONTRAST provides the proper balance between black and white picture shades. The Contrast Control is located on the Control Panel of the cabinet front. See the illustration above.

BRIGHTNESS controls the illumination on the picture. The Brightness control is located on the cabinet back.

MAINTENANCE

CAUTION! To prevent a possible shock hazard, remove the plug from the power outlet before cleaning the picture tube face. Use a solution of mild detergent and warm water on a clean cellulose sponge or chamois cloth to clean the picture tube face and bezel. Do not use an excessive amount of water. The picture tube face must be thoroughly dry before operating the set.

WARNING! HIGH VOLTAGES

Up to 10 thousand volts are used in the operation of this TV receiver. The rear cover is interlocked to prevent dangerous electrical shock. Do not attempt to defeat its purpose. Remove the rear cover completely. Sears Service is easily obtained.
If—after following all the above instructions—you find that service is necessary, call your Sears Store or Catalog Sales Office, or write to the Sears branch from which you purchased the unit. Give the Model number and explain the difficulty. We will advise you how to obtain service.

WE SERVICE WHAT WE SELL --
no matter where you live in the U.S.A.

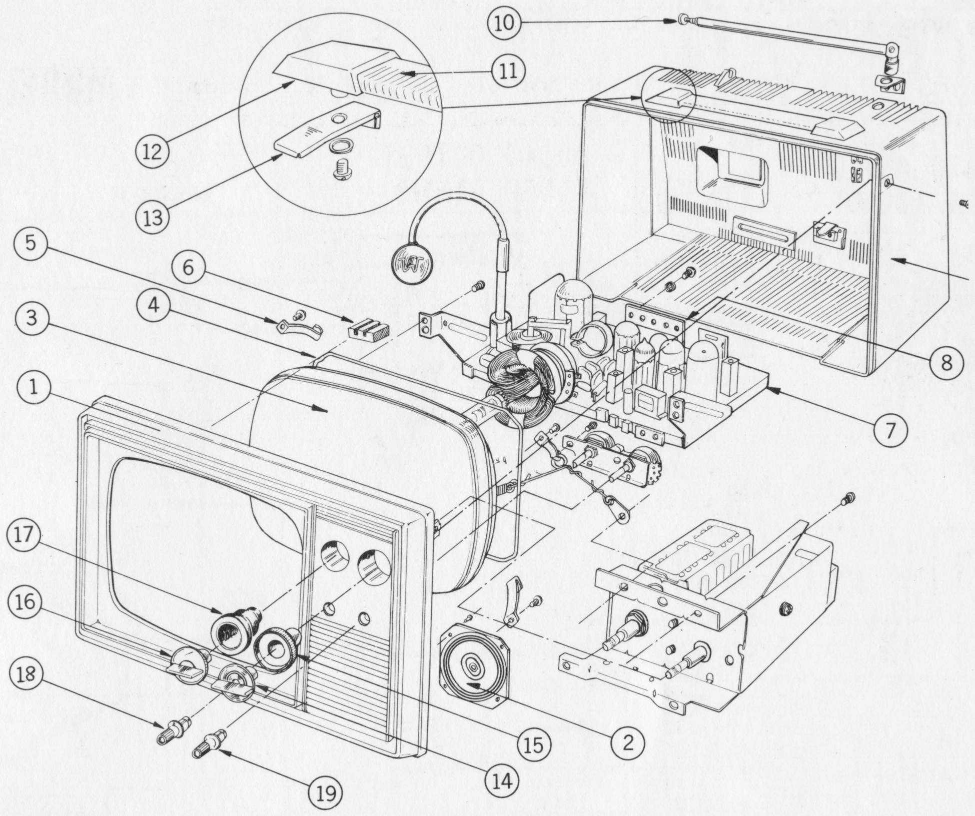
Your Sears Television takes on new value when you discover that Sears has 2000 Service units throughout the country using 1,000 fully-equipped trucks and staffed by 12,000 factory trained technicians. These men are Service Professionals who back up all Sears Guarantees. They use Sears approved parts and methods for expert repairs to fulfill the pledge: "We Service What We Sell."

PUT SEARS UNDER CONTRACT TO YOU
with a Sears Maintenance Agreement. . . .

Sears electronic products are engineered, manufactured and tested for years of dependable performance, yet every precision instrument may require adjustments or repairs from time to time. A Sears Maintenance Agreement relieves you completely of all service worries.
All necessary parts and technical service are provided as needed. Unexpected repair bills are eliminated.

- Installation checked in your home at your request.
- Visual check of your antenna system at your request.
- Prompt response to service requirments.
- Unlimited number of home service calls at no extra cost.
- All necessary parts and technical service to keep set operating at peak efficiency.
- Sears assumes complete responsibility for all repairs and service from normal use.
- Preventive maintenance check-up and adjustment during last two months of Maintenance Agreement at your request and convenience.
- Maintenance Agreement renewal year after year.

This unlimited coverage is available for only pennies a day.


1
2
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14
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16
17
18
19

CABINET PARTS LIST FOR MODEL SERIES 564.50010000

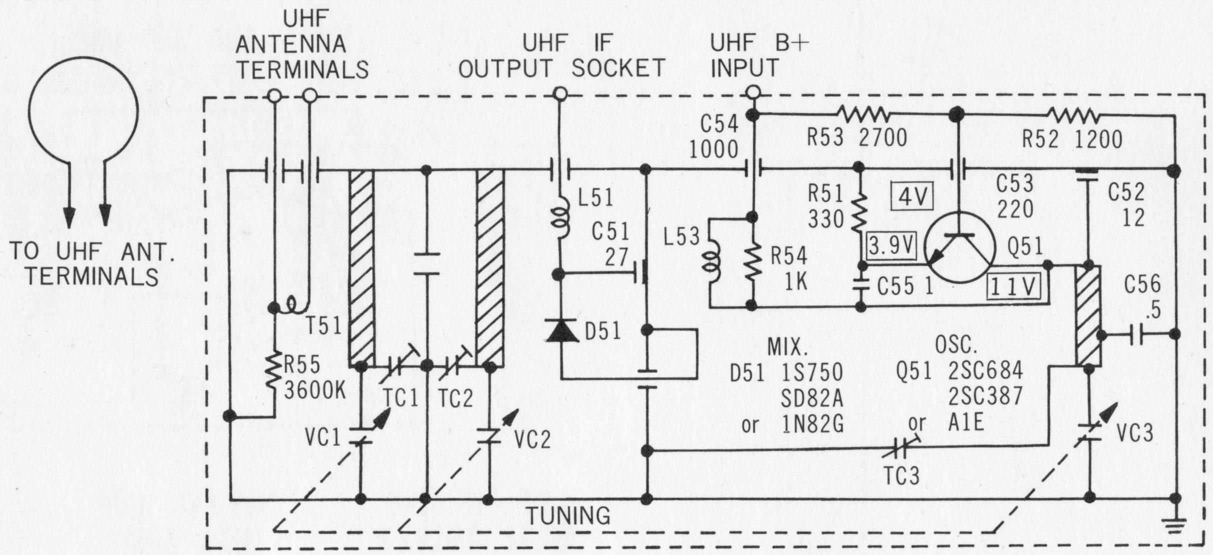
Key No.	Part No.	Description
	46-38384-3	Owner's Manual
		For additional Service information, order the Technical Manual for your unit by Model Number from your local Sears Store or Service Center.
1	46-42147-3	Cabinet Front
2	46-33120-3	Speaker, 3", 4 ohm
	46-57150-3	Screw, Self Tapping, 3×10mm, Used with Key No. 2 (4 used)
3	*	Picture Tube, Type 240CB4A
4	46-22269-3	Harness, Picture Tube
	46-57392-3	Screw, 4 × 60mm, ISO, Used with Key No. 4
	46-5690-3	Nut, Hex, 4mm, ISO, Used with Key No. 4
	46-5836-3	Washer, Flat, 4mm, Used with Key No. 4 (2 used)
5	46-1197-3	Harness Retainer
	46-57152-3	Screw, Self Tapping, 4×10mm, Used with Key No. 5 (4 used)
6	46-2845-3	Rubber Pad, Picture Tube Holding (6 used)
7	* *	Chassis Assembly
	46-57152-3	Screw, Self Tapping, 4×10mm, (2 used to mount Left and Right Corner of Chassis)
	46-5741-3	Screw, Self Tapping, 4×12mm, (2 used to mount Bottom of Chassis)
8	※	Fiber, Insulation, Rear Control
	46-57150-3	Screw, Self Tapping, 3×10mm, (2 used to mount Insulation Fiber)
	46-58267-3	Washer, Flat, 3×10×1.0mm, (2 used to mount Insulation Fiber)
9	46-42148-3	Cabinet Back (with Model No. Plate)
	※	Screw, Self Tapping, Black, 4×12mm, (2 used to mount Bottom of Cabinet Back)
	※	Screw, Self Tapping, Black, 4×12mm, (2 used to mount side of Cabinet Back)
10	46-8234-3	Tele-Roto Antenna
	※	Tele-Roto Antenna Mounting Bracket
	46-57315-3	Screw, 3×8mm, ISO, Used with Key No. 10
	46-57150-3	Screw, Self Tapping, 3×10mm, (2 used to mount Tele-Roto Antenna Mounting Bracket)
11	46-49117-3	Handle Strap
12	46-21184-3	Handle Retainer (2 used)
13	46-49118-3	Handle Mounting Base (2 used)
	46-57288-3	Screw, 4×10mm, ISO, Used with Key No. 12 (2 used)
	46-58144-3	Washer, Spring, 4mm, Used with Key No. 12 (2 used)
14	46-52348-3	Knob, VHF Channel Selector
15	46-52279-3	Knob, Fine Tuning
16	46-52280-3	Knob, UHF Channel Selector
17	46-6742-3	Indicator, UHF
18	46-52349-3	Knob, Off-On / Volume
19	46-52350-3	Knob, Contrast

* Contact Sears Service for Picture Tube replacement.

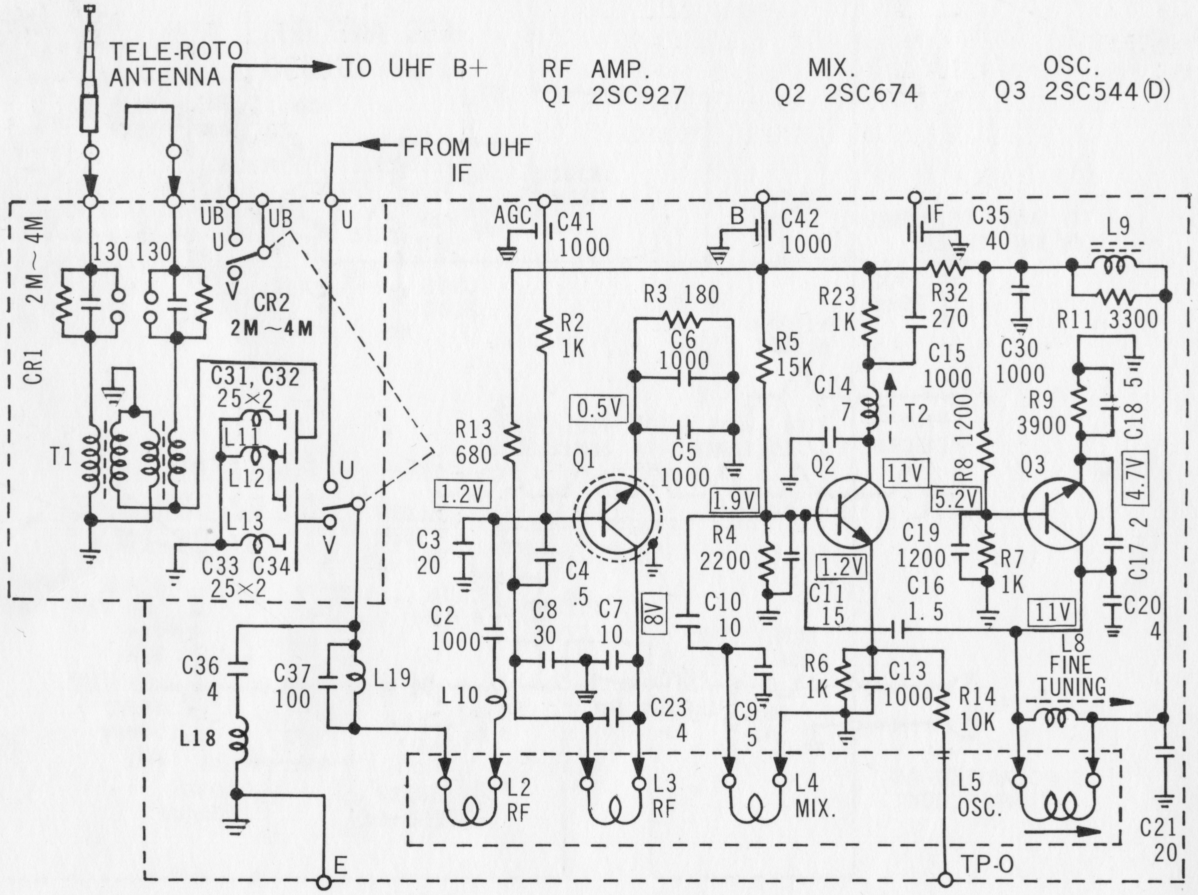
** For Repair Parts List, order the Technical Manual for your Model from your local Sears Store or Service Center.

※ Not Service Parts.

TUNER SCHEMATIC DIAGRAMS

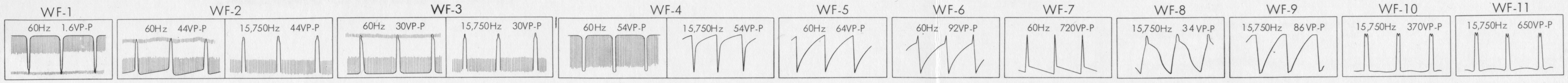

TO UHF ANT. TERMINALS
UHF ANTENNA TERMINALS
UHF IF OUTPUT SOCKET
UHF B+ INPUT
C54 1000
R53 2700
R52 1200
L51
C51 27
L53
R51 330
4V
C53 220
C52 12
3.9V
Q51
11V
R54 1K
C55 1
C56 .5
T51
R55 3600K
D51
MIX. D51 1S750 SD82A or 1N82G
OSC. Q51 2SC684 2SC387 or A1E
TC1
TC2
VC1
VC2
TC3
VC3
TUNING

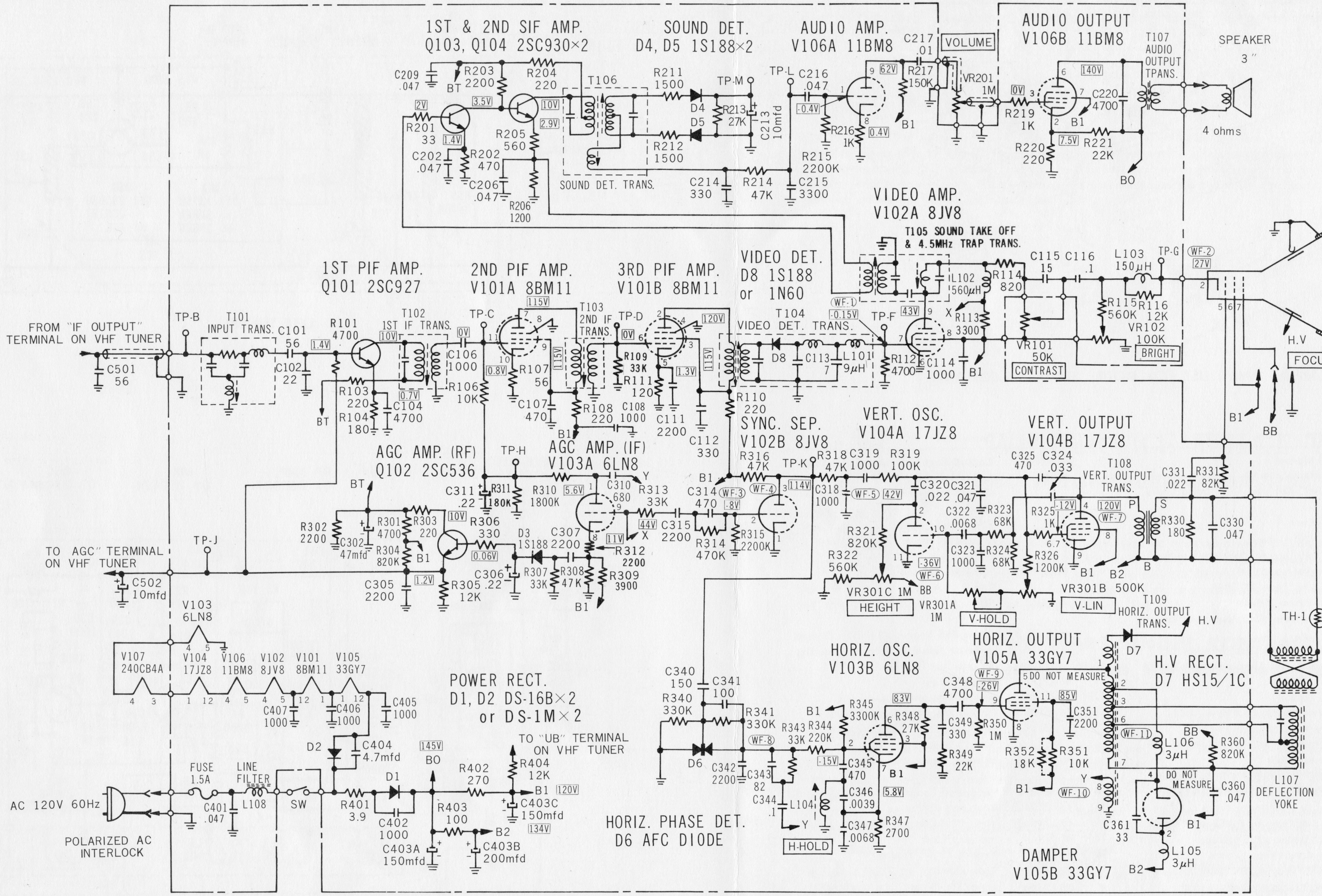
UHF TUNER


TELE-ROTO ANTENNA
TO UHF B+
FROM UHF IF
RF AMP. Q1 2SC927
MIX. Q2 2SC674
OSC. Q3 2SC544(D)
CR1 2M～4M
130
130
UB
UB
U
V
CR2 2M～4M
T1
C31, C32 25×2
L11
L12
L13
C33 C34 25×2
AGC
C41 1000
B
C42 1000
IF
C35 40
L9
R3 180
C6 1000
R2 1K
R5 15K
R23 1K
R32 270
C15 1000
C30 1000
R11 3300
C14 7
T2
R8 1200
R9 3900
C18 5
0.5V
R13 680
C5 1000
1.2V
Q1
1.9V
Q2
11V
5.2V
Q3
4.7V
C3 20
C4 .5
R4 2200
1.2V
C11 15
C19 1200
C16 1.5
R7 1K
11V
C17 2
C20 4
C2 1000
C8 30
C7 10
8V
C10 10
C36 4
C37 100
L19
L10
C23 4
C9 5
R6 1K
C13 1000
R14 10K
L8 FINE TUNING
L18
L2 RF
L3 RF
L4 MIX.
L5 OSC.
E
TP-O
C21 20

VHF TUNER

MODEL 564.50010000



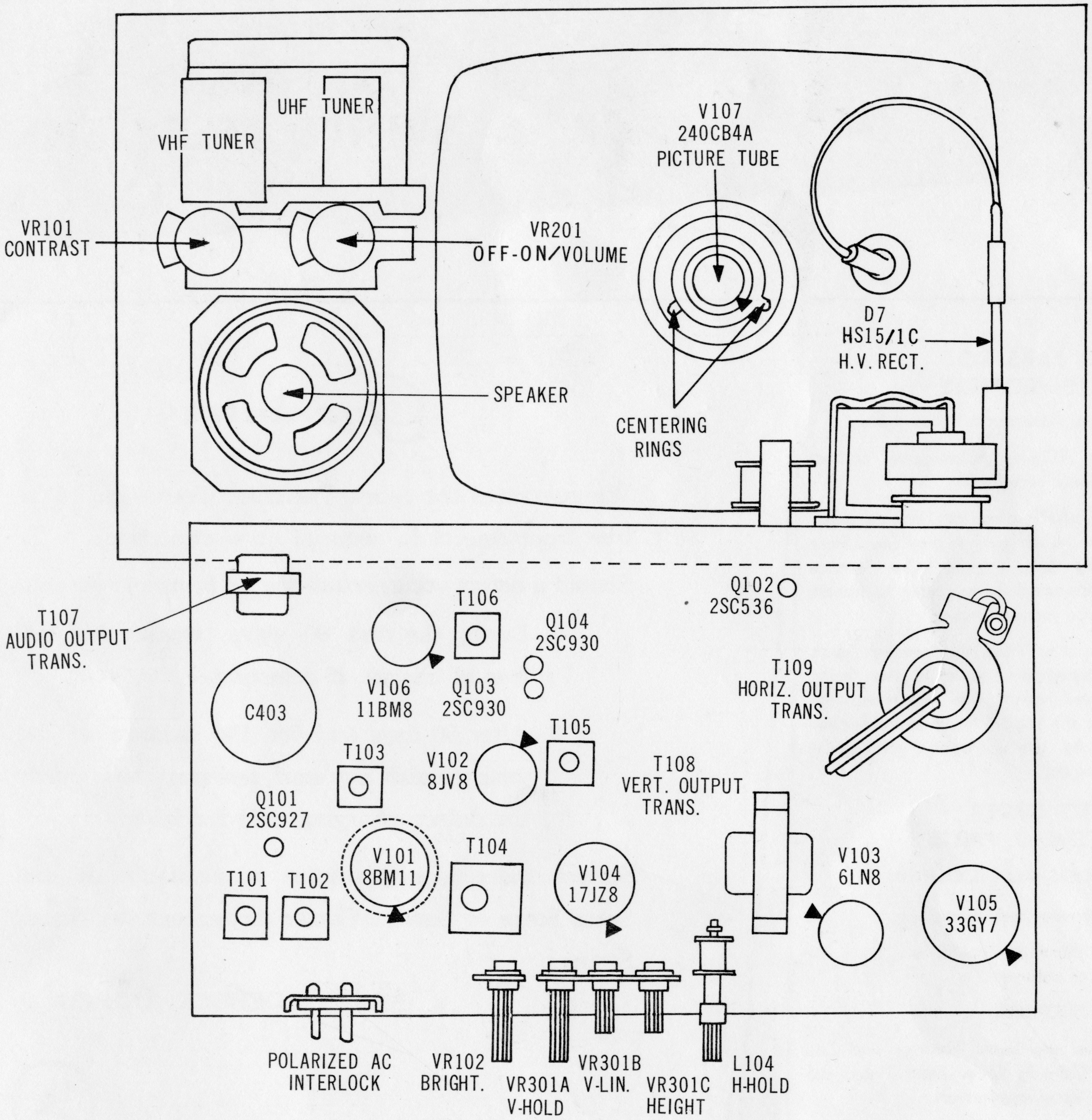

1ST & 2ND SIF AMP. Q103, Q104 2SC930×2
SOUND DET. D4, D5 1S188×2
AUDIO AMP. V106A 11BM8
VOLUME
AUDIO OUTPUT V106B 11BM8
T107 AUDIO OUTPUT TRANS.
SPEAKER 3″
4 ohms
SOUND DET. TRANS.
VIDEO AMP. V102A 8JV8
T105 SOUND TAKE OFF & 4.5MHz TRAP TRANS.
PICTURE TUBE V107 240CB4A
FROM "IF OUTPUT" TERMINAL ON VHF TUNER
T101 INPUT TRANS.
1ST PIF AMP. Q101 2SC927
T102 1ST IF TRANS.
2ND PIF AMP. V101A 8BM11
T103 2ND IF TRANS.
3RD PIF AMP. V101B 8BM11
VIDEO DET. D8 1S188 or 1N60
T104 VIDEO DET. TRANS.
CONTRAST
BRIGHT
FOCUS
H.V
AGC AMP. (RF) Q102 2SC536
AGC AMP. (IF) V103A 6LN8
SYNC. SEP. V102B 8JV8
VERT. OSC. V104A 17JZ8
VERT. OUTPUT V104B 17JZ8
T108 VERT. OUTPUT TRANS.
HEIGHT
V-HOLD
V-LIN
TO "AGC" TERMINAL ON VHF TUNER
T109 HORIZ. OUTPUT TRANS.
HORIZ. OSC. V103B 6LN8
HORIZ. OUTPUT V105A 33GY7
H.V RECT. D7 HS15/1C
DO NOT MEASURE
L107 DEFLECTION YOKE
TH-1
POWER RECT. D1, D2 DS-16B×2 or DS-1M×2
TO "UB" TERMINAL ON VHF TUNER
HORIZ. PHASE DET. D6 AFC DIODE
H-HOLD
DAMPER V105B 33GY7
AC 120V 60Hz
POLARIZED AC INTERLOCK
FUSE 1.5A
LINE FILTER
SW

NOTES:

1. All resistance values in ohms K=1,000 M=1,000,000.
2. Unless otherwise noted in schematic, all capacitors less than 1 are expressed in mfd, and the values larger than 1 are in pF.
3. Voltage reading taken with "VTVM" from point indicated to chassis ground, Tuner on unused channel, contrast at maximum, AGC at fully clockwise, other controls at normal, line voltage 120 volts.
4. All waveforms measured with strong signal input, contrast set to give normal picture and AGC line operating normally.
5. Voltage reading may vary ± 20%.
6. If picture is too wide, clip the wire near R351. This wire may have been opened in some chassis as a result of factory adjustment.

CHASSIS SCHEMATIC DIAGRAM

NOTE: The schematic diagram shown is representative only. For detailed service information, refer to the corresponding Model Number in the Div. 57 Technical Manual.


UHF TUNER
VHF TUNER
VR101
CONTRAST
VR201
OFF-ON/VOLUME
V107
240CB4A
PICTURE TUBE
SPEAKER
CENTERING
RINGS
D7
HS15/1C
H.V. RECT.
T107
AUDIO OUTPUT
TRANS.
T106
Q104
2SC930
Q102
2SC536
V106
11BM8
Q103
2SC930
T109
HORIZ. OUTPUT
TRANS.
C403
T103
V102
8JV8
T105
T108
VERT. OUTPUT
TRANS.
Q101
2SC927
V101
8BM11
T104
V104
17JZ8
V103
6LN8
V105
33GY7
T101
T102
POLARIZED AC
INTERLOCK
VR102
BRIGHT.
VR301A
V-HOLD
VR301B
V-LIN.
VR301C
HEIGHT
L104
H-HOLD

TUBE VIEW OF CHASSIS

Sears

owner's manual

SEARS
9" PORTABLE
BLACK & WHITE TELEVISION

IF UNIT FAILS TO OPERATE PROPERLY

Reread the instructions in this manual.

Be sure AC plug makes good contact in AC power receptacle.

If the unit still does not operate properly, take it to your nearest Sears Store or Catalog Sales Office. Our service departments are fully equipped to handle your service requirements.

If you do not have a convenient Sears Service department, write to the Sears branch from which you purchased the unit. Give the Model Number and explain the difficulty. We will advise you how to obtain service.

HOW TO ORDER REPLACEMENT PARTS

PART ORDERS MUST CONTAIN:

1. Part Number and description.
2. Model Number — found on back or inside of cabinet.

WHERE TO ORDER:

Order from any Sears, Roebuck and Co., Retail or Catalog Order Store. Prices are available upon application.

Guarantee

We guarantee the Sears Portable Television to be free from defects in material or workmanship.

Should a defect occur, return the set to us and we will:

1. During the first 90 days, repair the set, free of charge, if defective.
2. After 90 days and for the balance of the year, furnish any part necessary to remedy the defect, charging only for labor.

Service under your guarantee is available at any Sears Store or Service Center throughout the United States.

SEARS, ROEBUCK AND CO.

UL ®

SEARS, ROEBUCK AND CO., U.S.A.

57-5001

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